

1 **(BSP September 27, 2004)**

2 **Cylindrical Bearing**

3 Unless other materials are specified in the Plans, cylindrical bearing assembly  
4 components shall conform to the following requirements for those components shown  
5 and specified in the Plans:  
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7 **Steel Plates and Bars**

8 Steel plates and bars (base plates, bearing plates, guide bars, masonry plates, and  
9 sole plates) shall conform to ASTM A 36M, and the dimensions shall comply with  
10 the details as shown in the Plans. The surface of the steel plates and bars in  
11 contact with stainless steel shall have an average surface roughness of 3.175  
12 micrometers or less. The surface within the recess of steel plates and bars  
13 retaining PTFE shall have an average surface roughness of 6.35 micrometers or  
14 less. All other steel plate and bar surfaces in contact with other cylindrical bearing  
15 assembly components shall have an average surface roughness of 12.70  
16 micrometers or less.  
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18 **Polytetrafluoroethylene (PTFE)**

19 PTFE shall be 100 percent virgin PTFE, woven PTFE fabric, or dimpled PTFE  
20 conforming to Section 18.8.2 of the AASHTO LRFD Bridge Construction  
21 Specifications, 1st Edition and latest interims.  
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23 **Stainless Steel**

24 Stainless steel sheet shall conform to ASTM A 240 Type 304L. Stainless steel in  
25 contact with PTFE shall be polished to a Number 8 mirror finish.  
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27 Stainless steel countersunk screws shall be hexagon socket type conforming to  
28 ANSI B 18.3 and shall conform to ASTM F 593 Type 304L.  
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30 **Silicone Grease**

31 Silicone grease shall conform to Military Specification MIL-S-8660.  
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33 **Bolts, Nuts and Washers**

34 Bolts, nuts and washers shall conform to Section 9-06.5(3).  
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36 **Anchor Bolt Assembly**

37 Anchor bolts shall conform to ASTM F 1554 Grade 105, including supplemental  
38 requirements S2, S3, and S5. Nuts shall conform to AASHTO M 291M Class 12.  
39 Washers shall conform to AASHTO M 293M. Bars shall conform to ASTM A 36M.  
40 Pipe shall conform to ASTM A 53 Grade B Type E or S, black.  
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42 **Resin Filler**

43 Resin filler shall conform to Section 6-02.2 as supplemented in these Special  
44 Provisions.  
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46 **Submittals of Acceptance Test Reports and Certificates**

47 The Contractor shall submit the following production samples, and test reports and  
48 certificates, to the Engineer for review, testing, and approval:  
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- 50 1. Manufacturer's certificate of compliance for the PTFE, resin filler, and  
51 silicone grease, in accordance with Section 1-06.3.  
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2. A 50 millimeter by 75 millimeter by 3.18 millimeter sample of PTFE taken from the lot of production material.
3. Certified mill test reports for all steel and stainless steel materials incorporated in the bearings.

The Contractor shall not ship the bearings from the fabricator's facility until receiving the Engineer's written approval of all production samples, and test reports and certificates.